

C-44 Reservoir/Stormwater Treatment Area (STA) Project

WRAC Issues Workshop

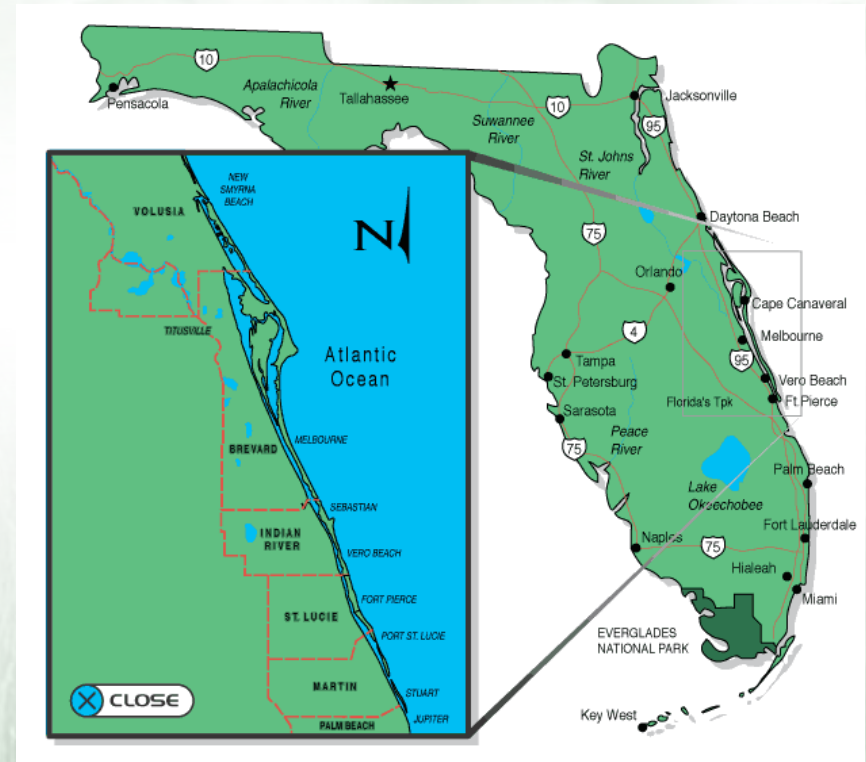
August 7, 2006



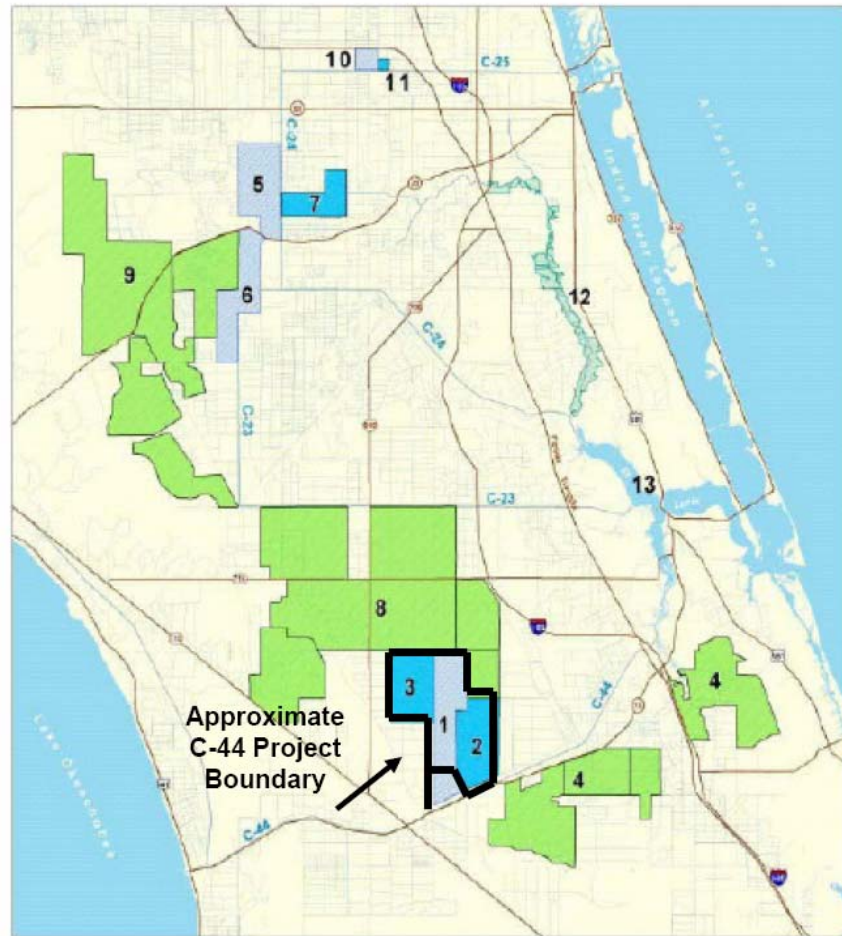
ONE COMPANY
*Many Solutions*SM

Indian River Lagoon (IRL): Estuary of National Significance

- 156 miles in Length
- Within 6 Florida Counties and Two Water Management Districts
- 5 Ocean Inlets
- Water Quantity, Quality, Timing, and Distribution Issues



IRL-S PIR Recommended Plan Components



C-44 Basin Components





1. C-44 Reservoir
2. C-44 Stormwater Treatment Area (East)
3. C-44 Stormwater Treatment Area (West)
4. Palmer Complex – Natural Storage and Water Quality Area

C-23/C-24 Basin Components

5. C-23/C-24 North Reservoir
6. C-23/C-24 South Reservoir
7. C-23/C-24 Stormwater Treatment Area
8. Allapattah Complex – Natural Storage and Water Quality Area
9. Cypress Creek/Trail Ridge Complex – Natural Storage and Water Quality Area

C-25, Northfork and Southfork Basin Components

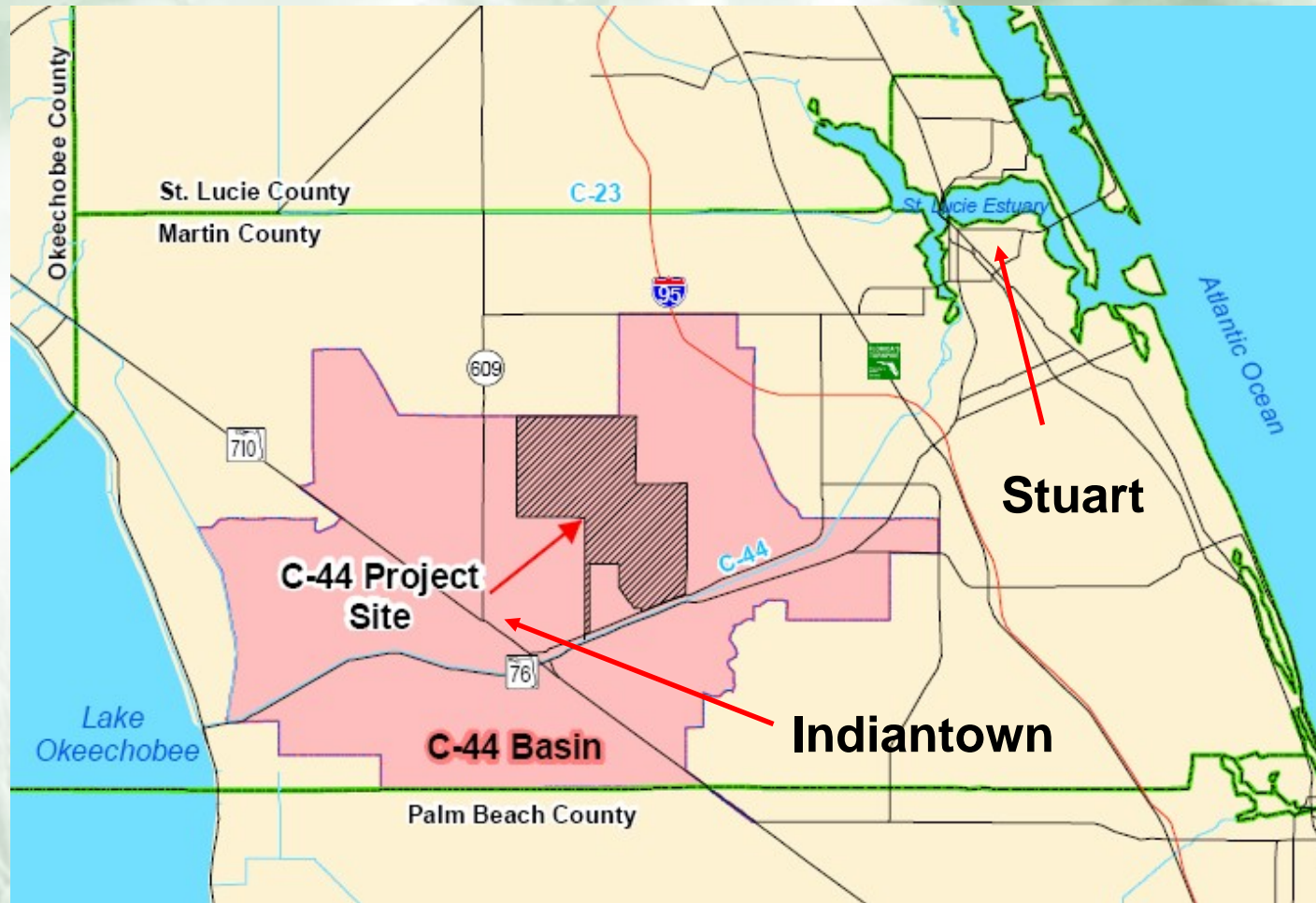
10. C-25 Reservoir
11. C-25 Stormwater Treatment Area
12. Northfork Natural Floodplain Restoration
13. Muck Remediation and Artificial Habitat

-  Natural Floodplain Restoration
-  Natural Storage and Water Quality Area
-  Reservoir
-  Stormwater Treatment Areas

C-44 Reservoir/STA PIR Goals

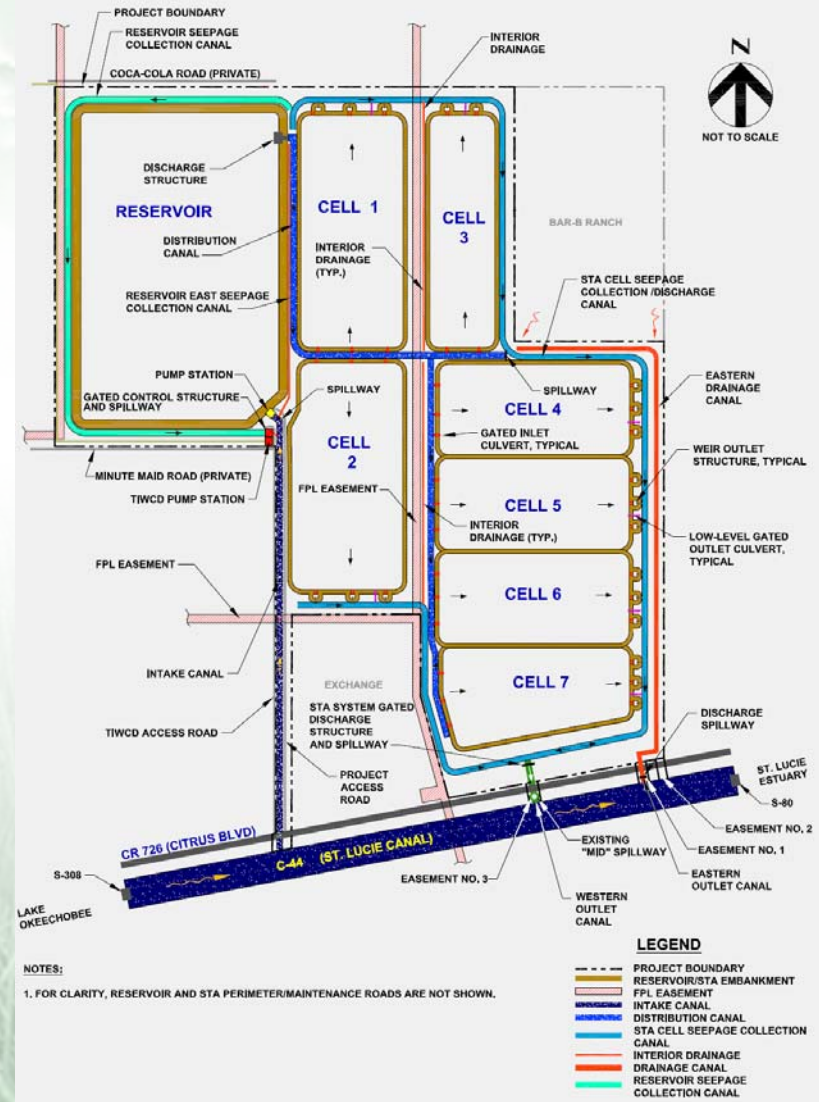
- Reduce C-44 Basin Runoff Peaks to the St. Lucie Estuary
- Reduce Nutrient Loads From C-44 Basin Runoff to the St. Lucie Estuary

C-44 Reservoir/STA Project Location



C-44 Reservoir/STA Proposed Configuration

- 12,000 Acre Site
 - Reservoir 3,400 Acres
 - STA Cells 6,300 Acres

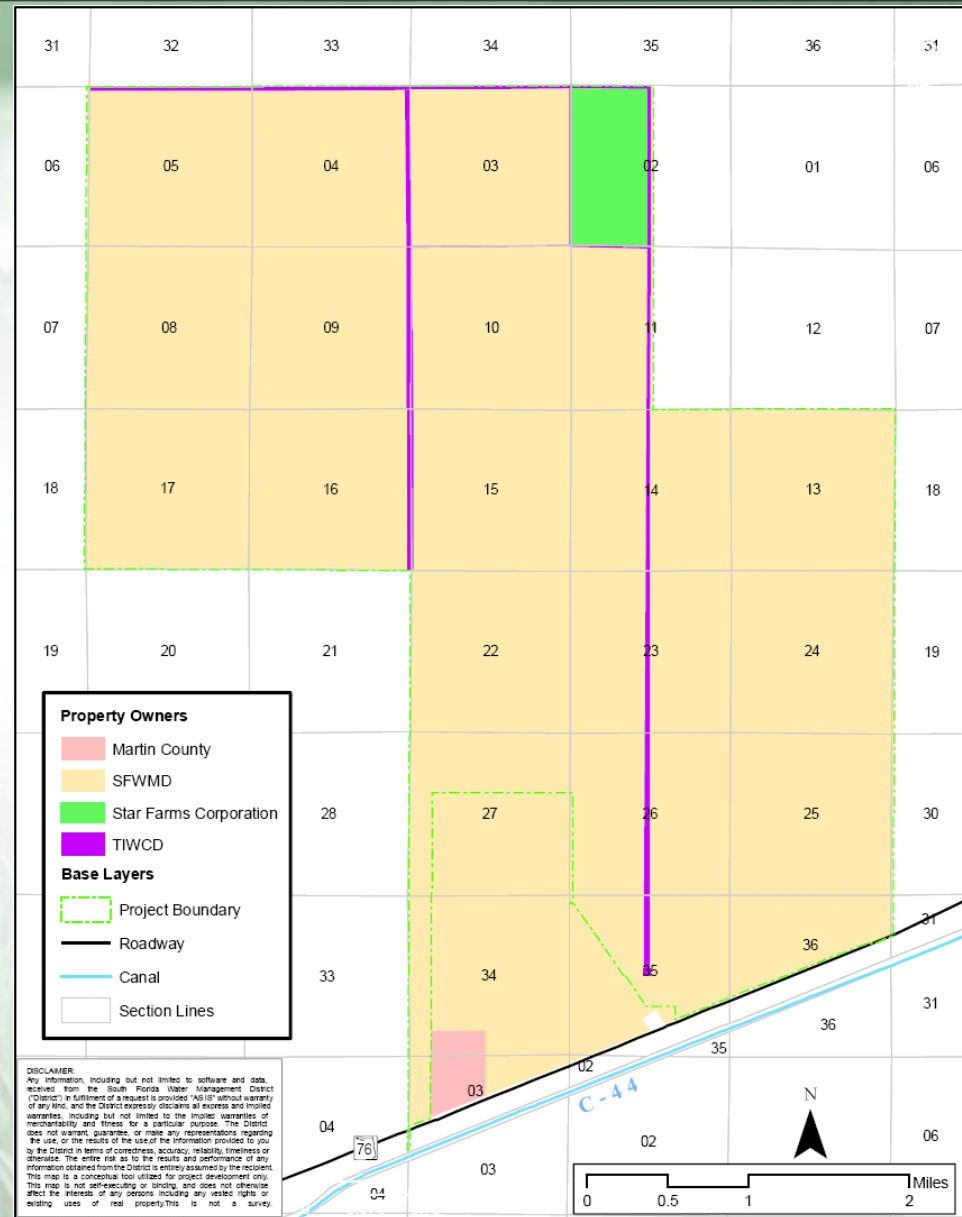


Site Ownership

- 12,000 Acres (Closed January 31, 2006)
- 640 Acres (Closed May 31, 2006)
- 300 Acres (Planned Closing August 2006)
- Exchange Planned for September/October 2006 of approximately 1,100 Acres
- Approximately 160 Acres of Troup Indiantown Water Control District (TIWCD) Land Awaiting Negotiation

Project Ownership

- Currently Owned by SFWMD
- Other Negotiations Pending



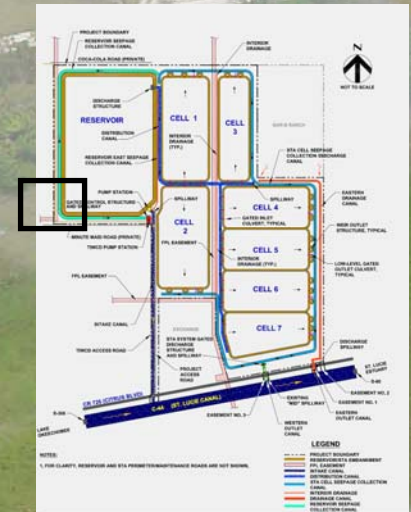
C-44 Reservoir/Stormwater Treatment Area Project

Current Land Use

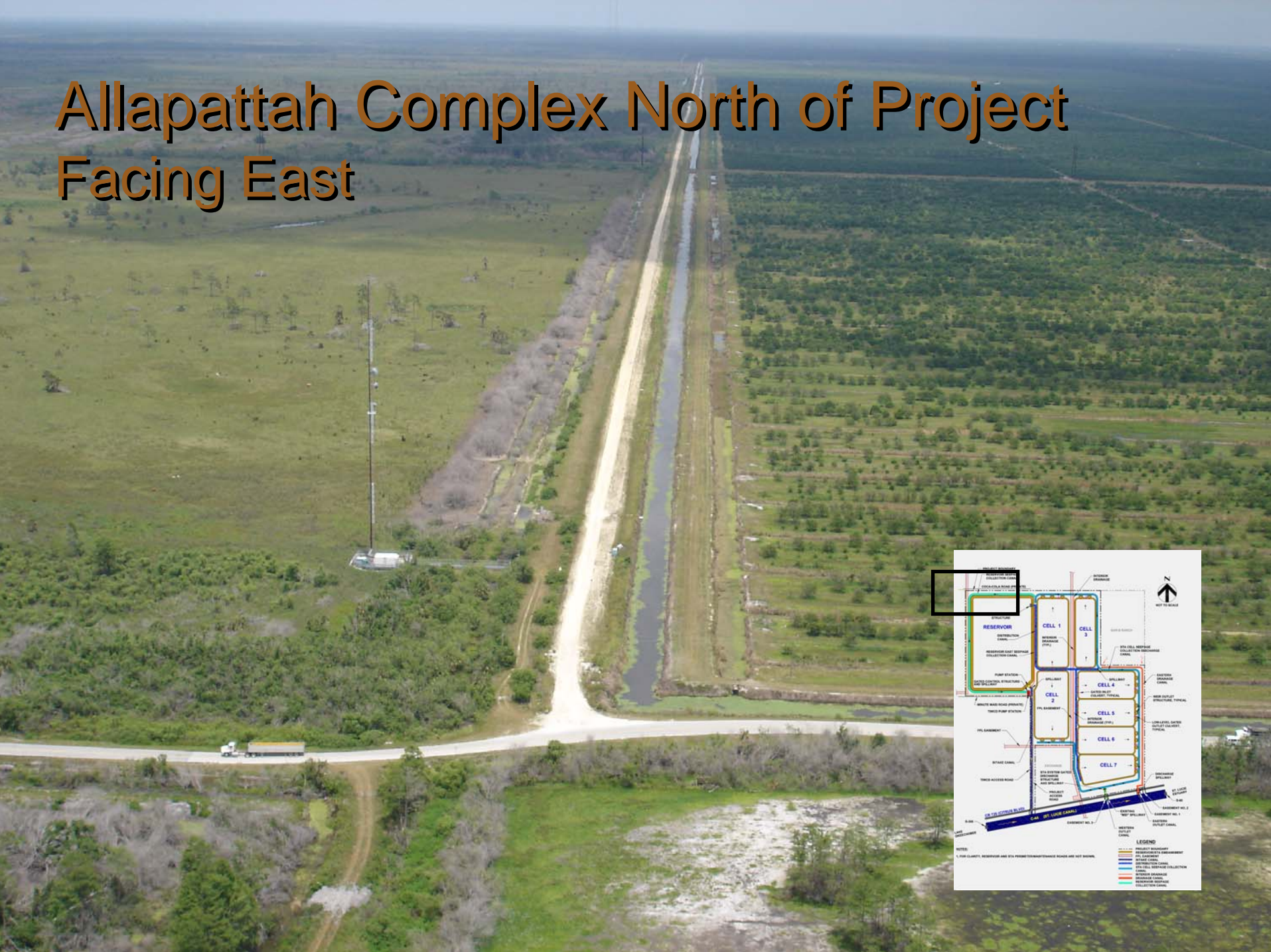
- 12,000 Acres in Active Citrus Grove Operation until June 2007
- Approximately 300 Acres in Active Sod Operation until July 2008

Adjacent Land Use

- North – Allapattah Complex
- West – Agriculture and Airport
- East – Agriculture
- South – Citrus Boulevard and C-44 Canal



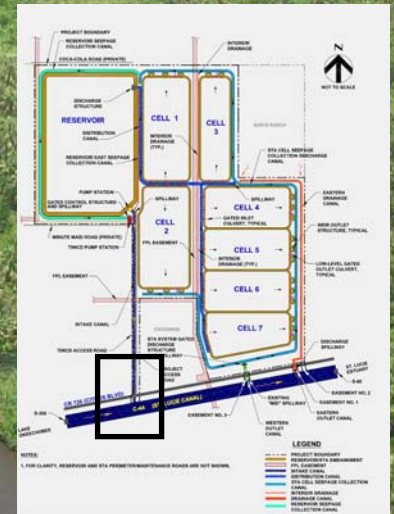
Allapattah Complex North of Project Facing East



Citrus Blvd/C-44 Canal South of Project Facing Northwest

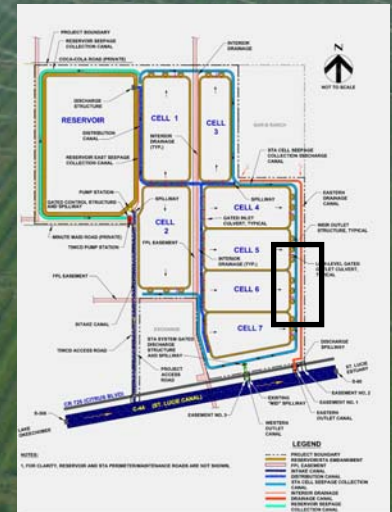
CITRUS BLVD.
TIWCD Irrigation Canal

C-44 Canal



Agricultural Lands East of Project Facing Northwest

Project Eastern Boundary



Citrus Blvd Crossing Western Outlet Canal

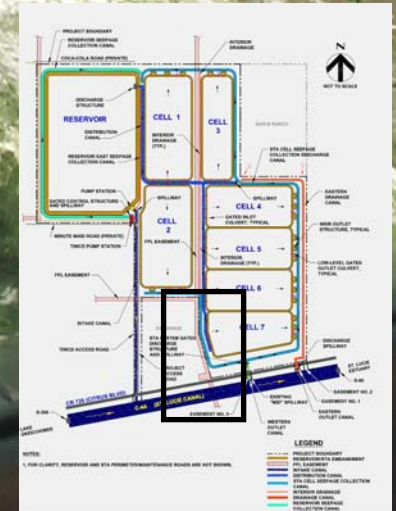
Canal Facing North

STA Cells

Existing Bridge

Citrus Blvd

Western Outlet Canal



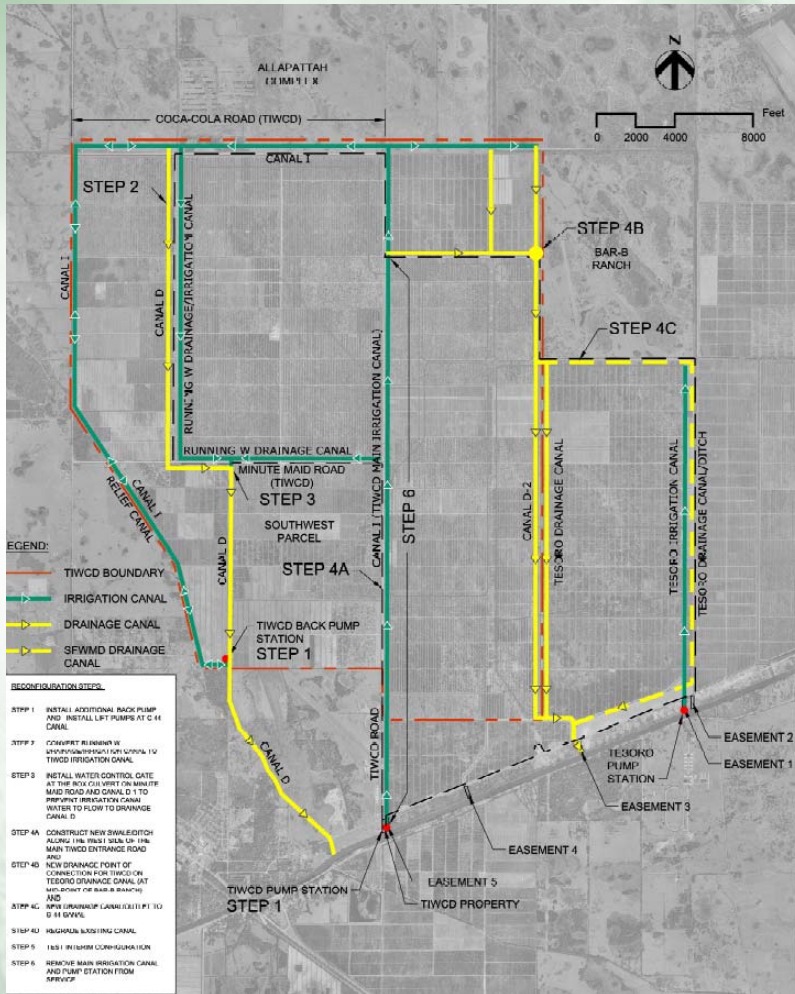
C-44 Canal

TIWCD

Troup Indiantown Water Control District

- TIWCD is a 298 Special Taxing District that Supplies Drainage and Irrigation to its Members
- TIWCD Service Area is 13,500 Acres
- The C-44 Project Encompasses 8,000 Acres of TIWCD's Service Area

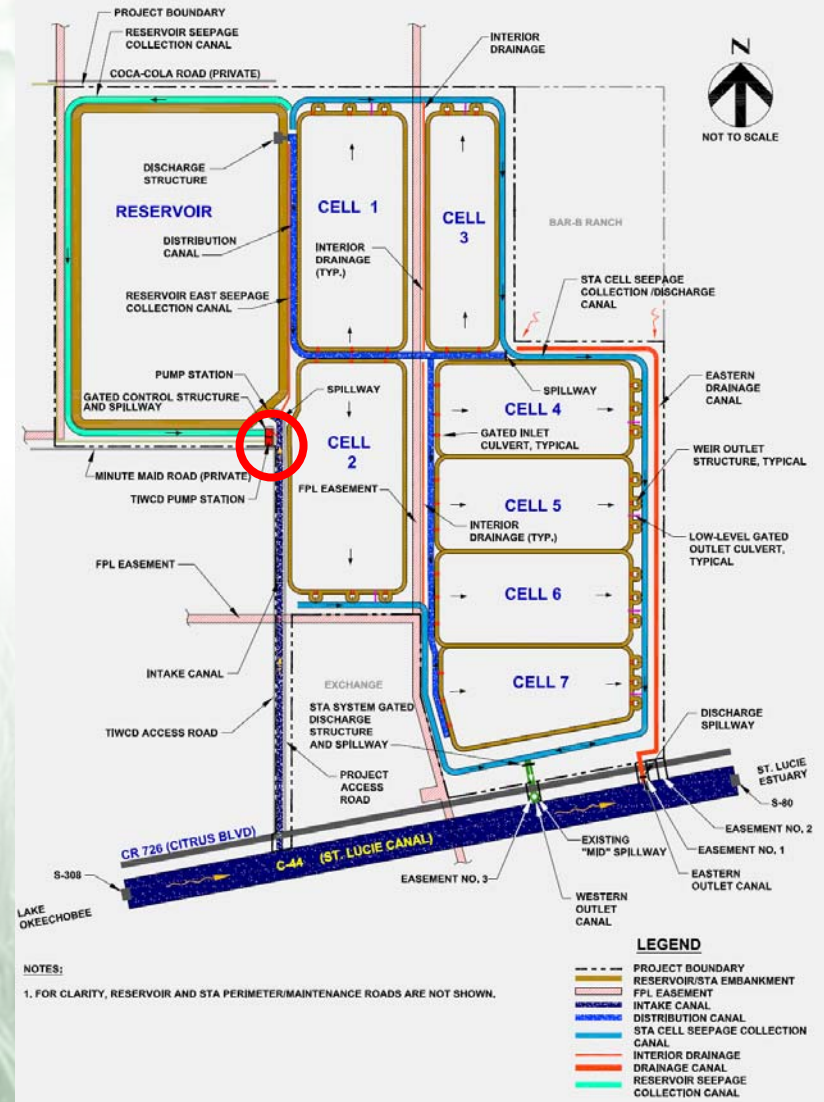
TIWCD Reconfiguration



- TIWCD Negotiations
- Additional 36,000 gallons per minute (gpm) Pump
- 30-Day Test Period
- Construction Start October 2006

New TIWCD Irrigation Pump Station

- 3 Pumps
- Capacity of 36,000 gpm
- Head of 15 feet



Test Cell Program

- 475 Acre Area
- 2 Reservoir Test Cells
 - Each 12.5 Acres (4.65 Acres Wetted Area Each)
 - 15 ft. Water Depth
- 2 STA Test Cells
 - Each 3 Acres
 - 1.5 ft. Water Depth
- Construction started February 17, 2006
- Substantial Completion June 21, 2006



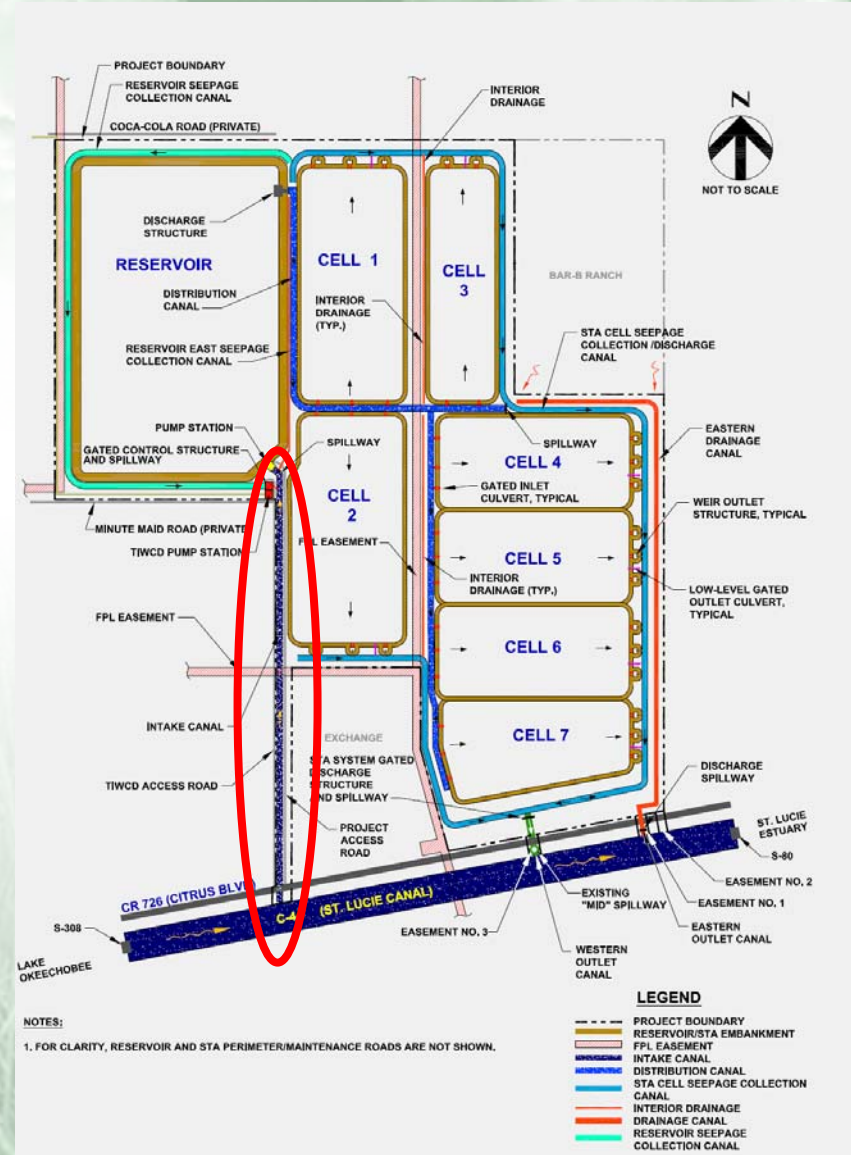
Test Cell Program

- Tests Cells will be Operated Through June 2007
- Continuous Recording of Water Level Information
 - Surface Water Levels
 - Ground Water Levels
- Environmental Monitoring of STA Test Cells
- Monthly Reports
- Test Cell Analytical Report August 31, 2006



Reservoir Intake Canal

- Expansion of Existing Canal
- Removal of Existing Pump Station
- Canal Length 20,000 Feet
- Bottom Elevation 3 Feet
- Water Surface Elevation Approximately 12.6 Feet (NAVD)
- Bottom Width Approximately 60 Feet
- 2,000,000 Cubic Yards of Excavation
- Access Road 20,000 Feet 24 Feet Wide
- Replace Box Culvert with New Bridge at Citrus Blvd.



Citrus Blvd Crossing Intake Canal Facing North



Airport

Citrus Blvd

Existing TIWCD Pump Station

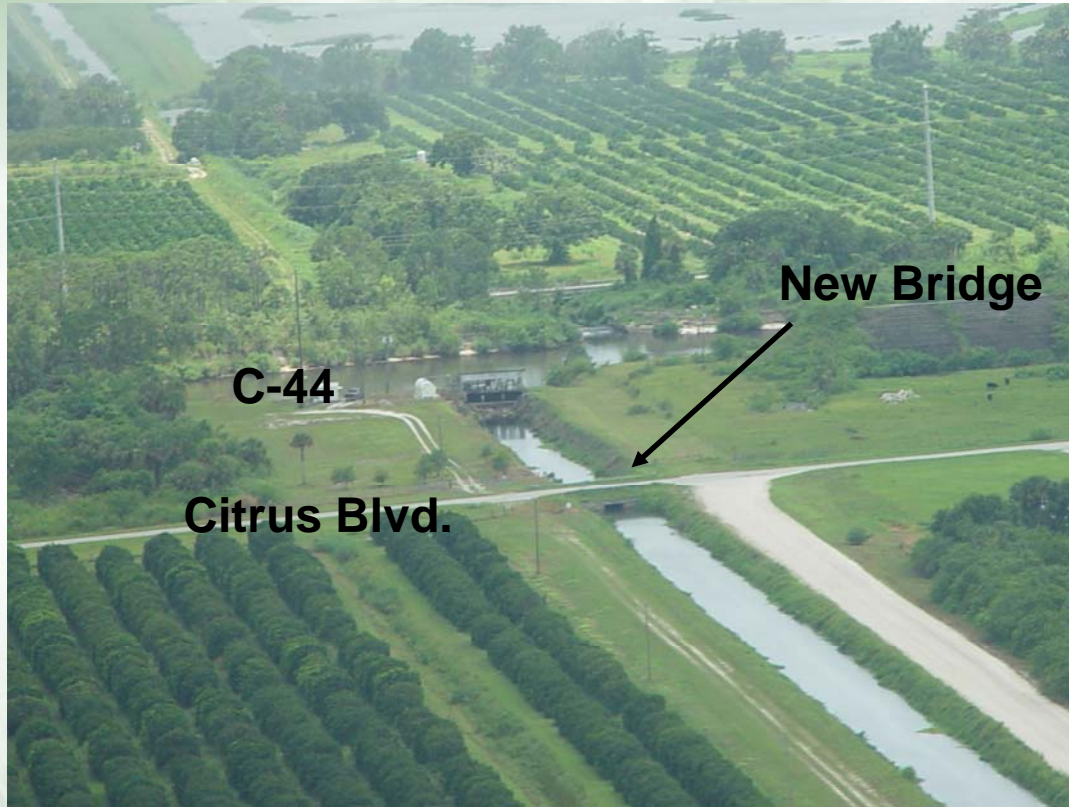
C-44 Canal

Location of Proposed Intake Canal Facing North



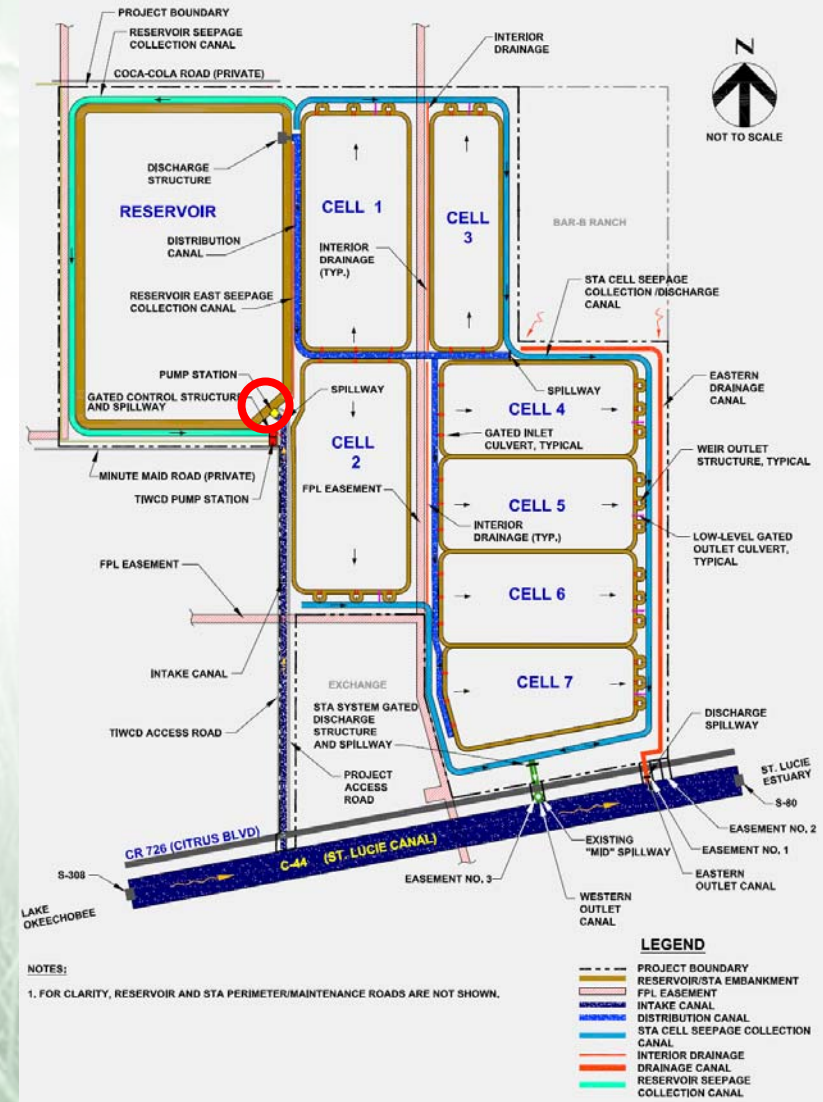
Citrus Boulevard Improvements

- New Bridge at Intake Canal



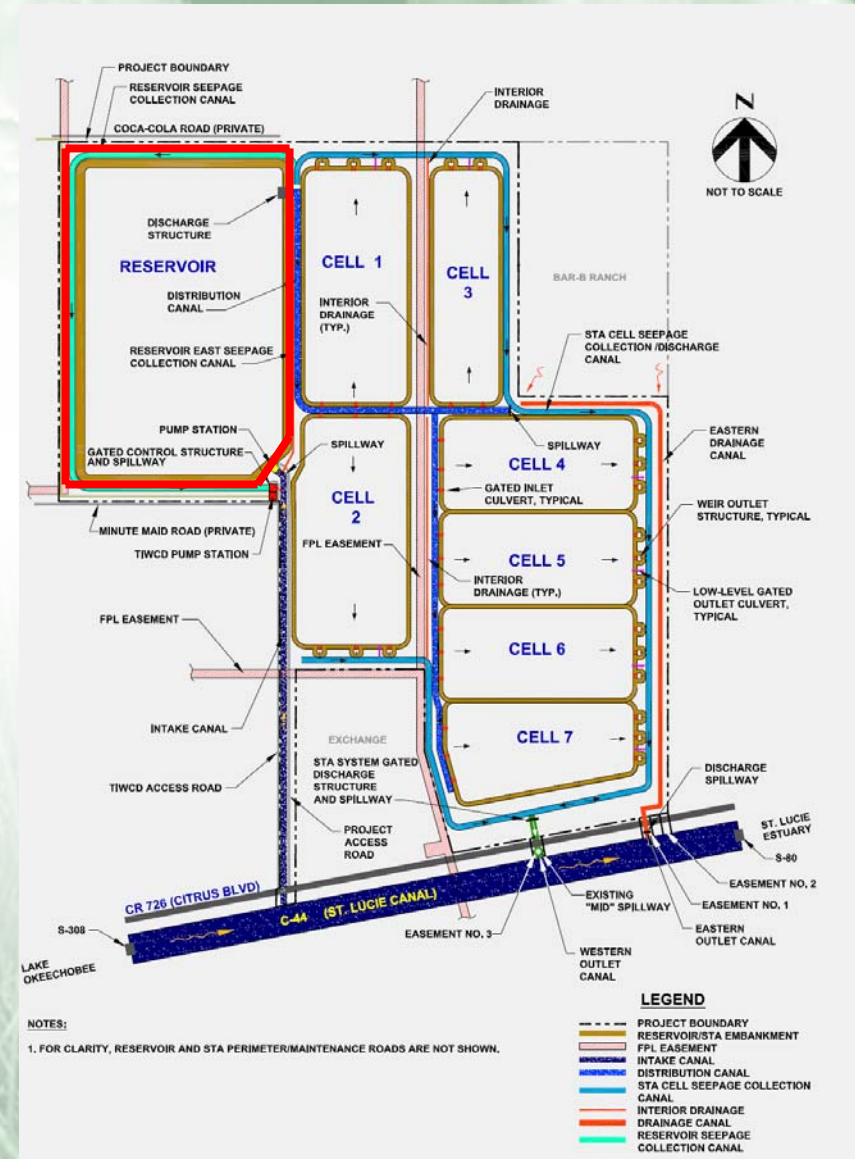
Reservoir Pump Station

- 4 Pumps
- 1,100 cfs Total Capacity
- Electric Pump Drivers
- TDH = 38 Feet
- 1700 Horsepower Motors

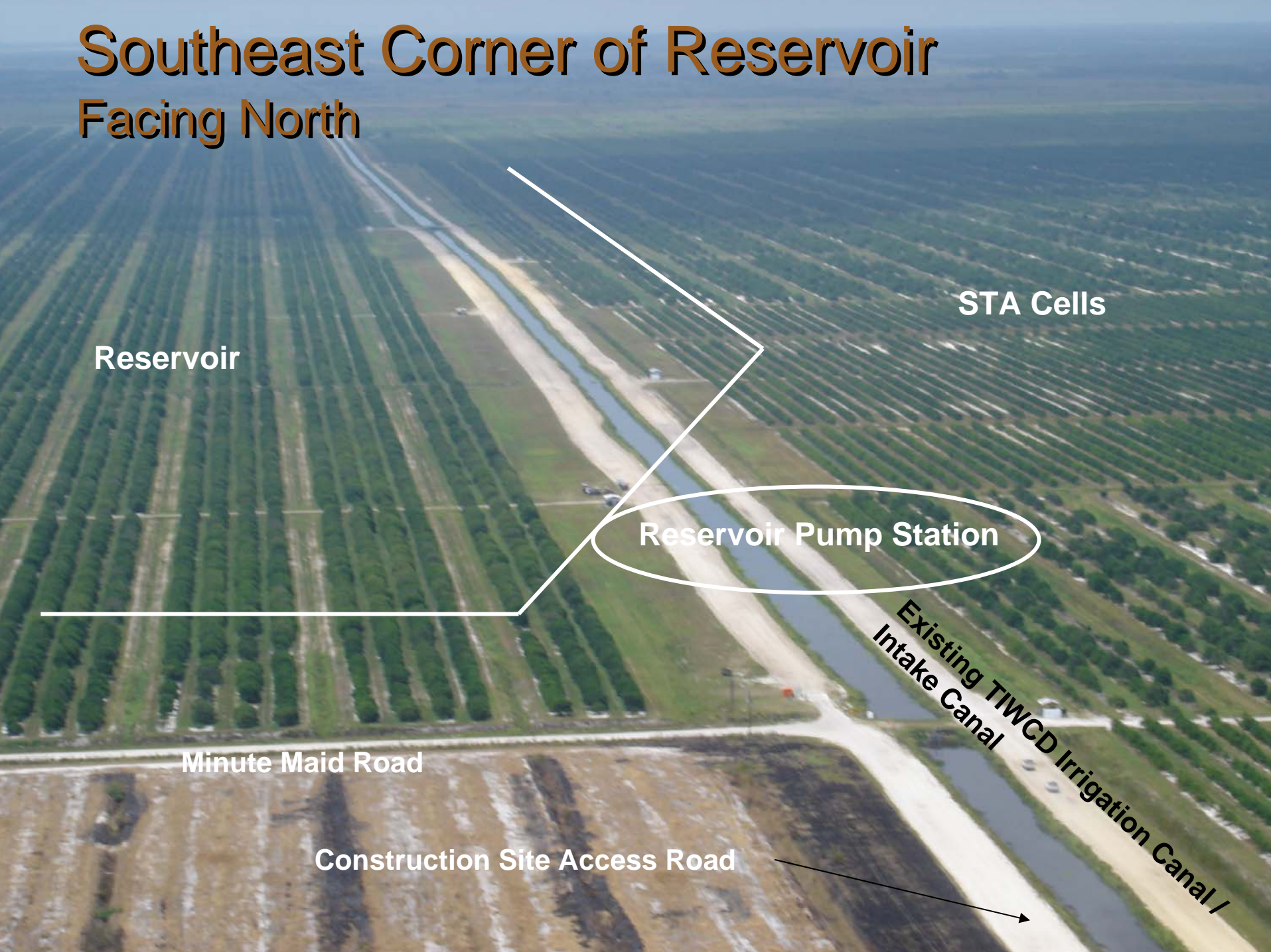


Reservoir

- 3,400 Acres
- 48,700 Foot Perimeter
- Crest Width 16 feet
- Embankment Height 29 Feet (15 Foot Water Depth)
- Internal Drain System
- Perimeter Seepage Collection Canal
- Interior Slope Protection with Soil-cement
- 4,000,000 Cubic Yards of Soil for Embankments
- 7,850,000 Square Feet of Sod



Southeast Corner of Reservoir Facing North



STA Cells

Reservoir

Reservoir Pump Station

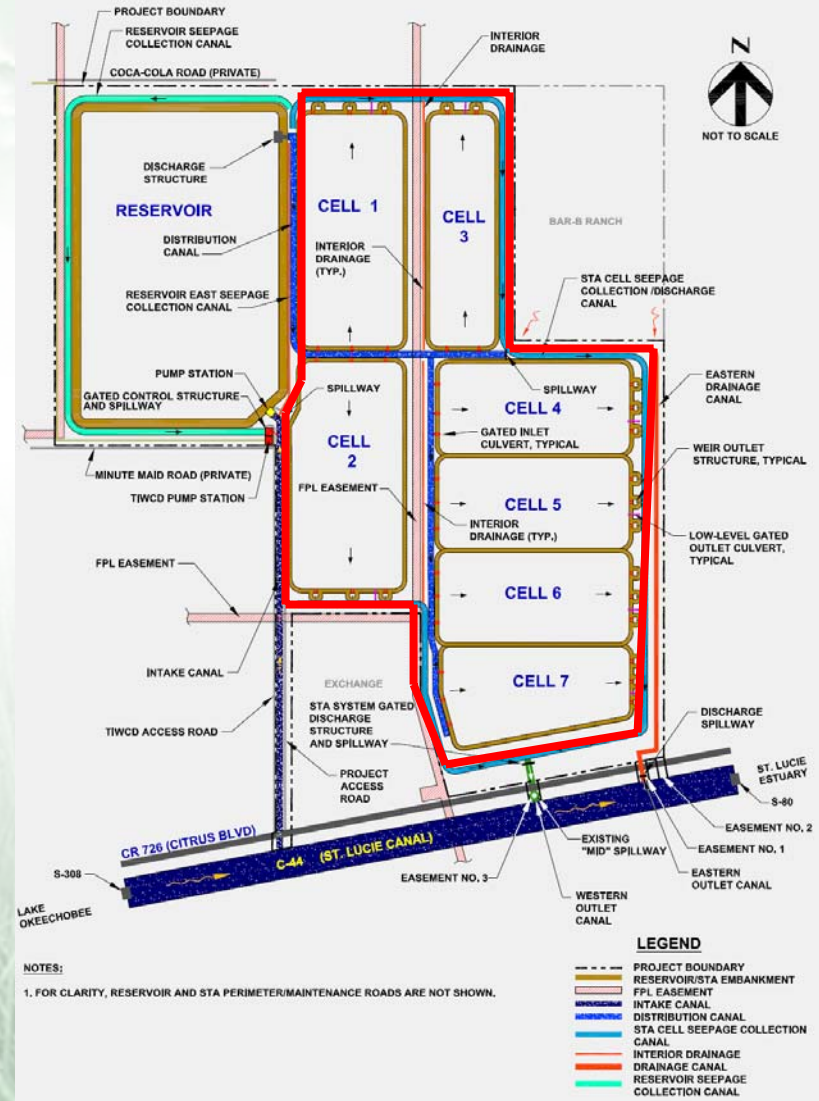
Minute Maid Road

Construction Site Access Road

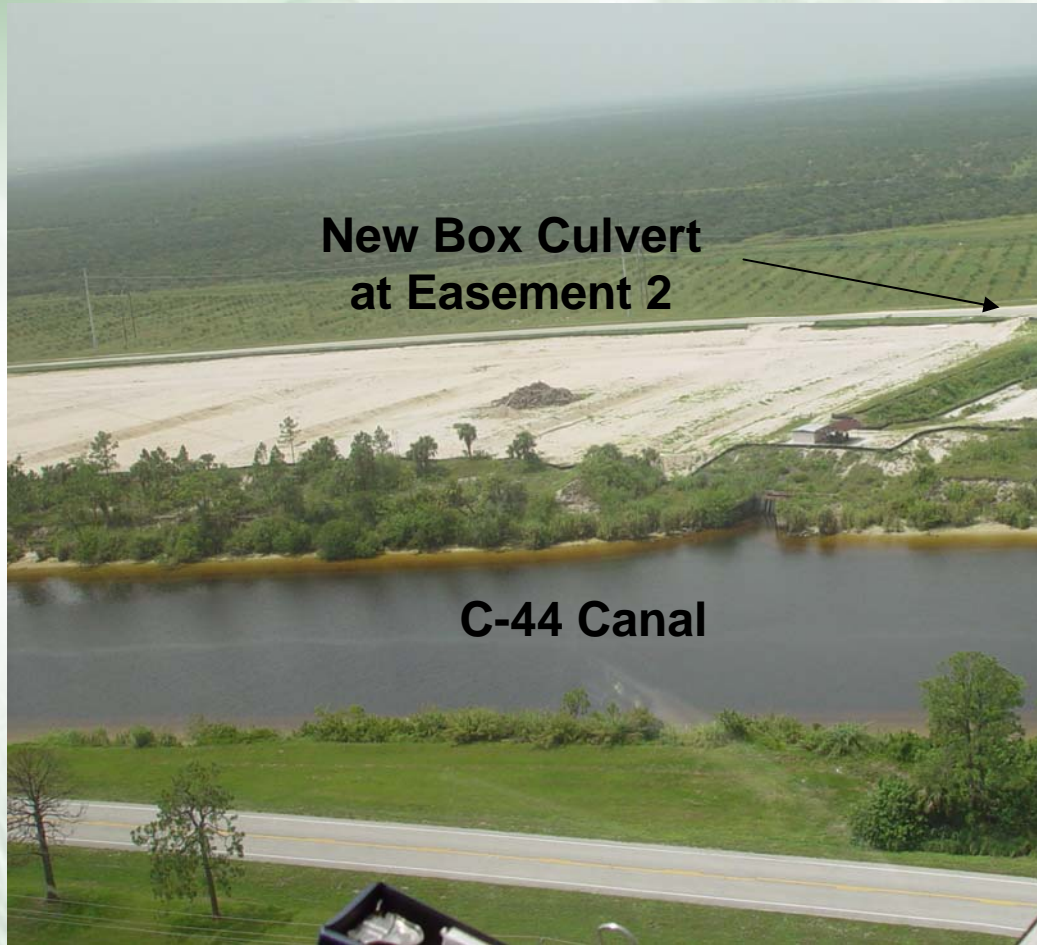
Existing TIWCD Irrigation Canal /
Intake Canal

Stormwater Treatment Areas

- 6,300 Acres Total for STA Cells
- 7 STA Cells
- 1.5 Foot Average Water Depth
- Gravity Flow from Reservoir
- Distribution Canals to STAs (41,000 feet)
- 2,261,000 Cubic Yards of Soil for Embankments
- Gated Inlets to STAs
- Fixed Weir Outlets
- Total of 47 Structures for Cells
- Collection Canals from Cells to Western Outlet Canal
- Separate Eastern Drainage Canal and Outlet

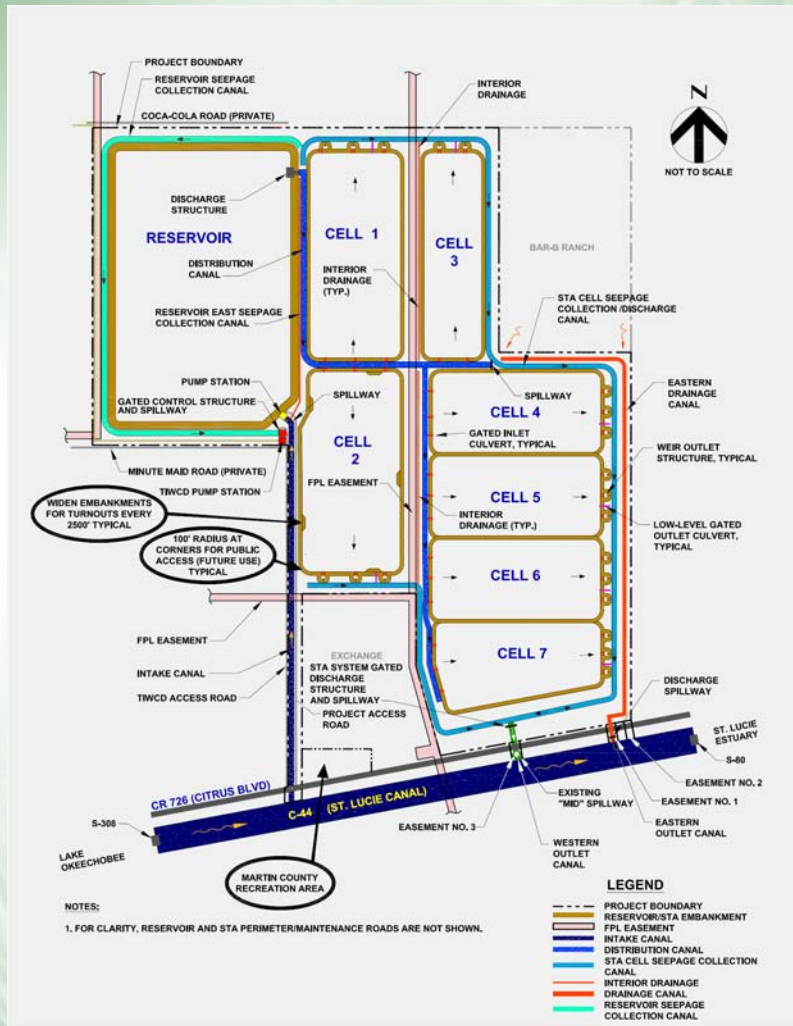


Citrus Boulevard Improvements



- New Box Culvert

Potential C-44 Project Recreation



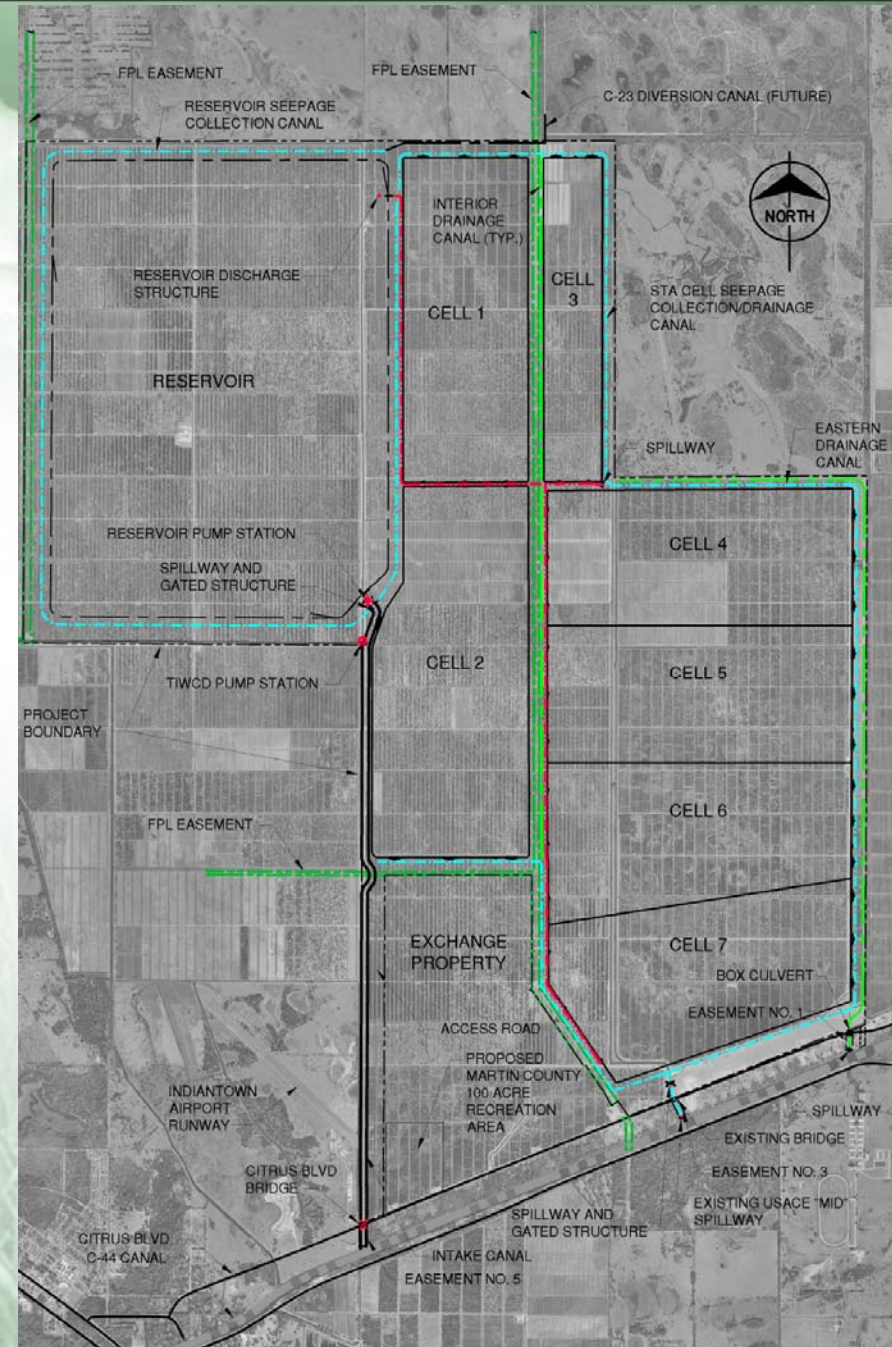
- County Park
 - 100 Acres Southwest of STA
- Project Lands
 - Fishing
 - Hiking
 - Bird/Wildlife Watching
 - Boating
 - Biking
 - Equestrian
 - Managed Hunting

C-44 Project Schedule

- **Basis of Design Report (BODR) Complete – April 14, 2006**
- **Temp. Reconfiguration of TIWCD Bid – August 2006**
- **Technical Review Board – August 18, 2006**
- **Preliminary Design Complete – September 13, 2006**
- **Temp. Reconfiguration of TIWCD Start – October 17, 2006**
- **Final Design & Bid Package Complete – March 22, 2007**
- **Main Construction Bid - April 2007**
- **Main Construction Start – June 13, 2007**
- **Construction Complete – December 31, 2009**

C-44 Project Budget

**Project Budget
(excluding land)
\$339,800,000**



Stakeholders' Comments

- Larger Reservoir
- Local Drainage Issues
- Recreational Opportunities
- Concerns about Sending Water North to C-23
- Safety
- 4-Lane Bridge Over Citrus Boulevard

C-44 Reservoir/STA Conceptual Project Rendering

